

ON THE BIRDS OF THE ISLAND OF BABBER.

BY DR. ERNST HARTERT.

HAVING returned to the East once more, our valued correspondent Mr. Heinrich Kühn has again commenced to collect birds on the less known islands of the great Eastern Archipelago.

In *Nor. Zool.* 1904. pp. 174—221 I gave a list of the birds collected by Mr. Kühn on the South-West Islands, and, as I said on p. 176, collections were not made on the more eastern islands, Sermatta, Luang and Babber. Mr. Kühn sent a party of Malayan collectors to Babber, who made a collection of 76 species. Unfortunately the collection does not seem to be a complete one, as the work on Babber had suddenly to be terminated, on account of the hostile behaviour of some of the natives.

A few Babber specimens have long ago reached the Dresden Museum, and were duly recorded and partly described as new by Dr. A. B. Meyer. Also Mr. Schädler sent a collection of 31 species (about half of those sent by Mr. Kühn) from Babber to the Leyden Museum, and the latter has been recorded by Dr. Otto Finsch in his valuable article "Systemat. Uebers. der Vögel der Südwest-Inseln" in *Notes Leyden Museum*, xxii. pp. 225—309 (1901).

The ornithology of Babber differs considerably from that of the more western islands, being in many instances the same as, or closely allied to, that of the Tenimber or Timorlaut group.

1. *Megapodius duperreyii* Less. & Garn.

Cf. *Nor. Zool.* 1904. p. 176.

3 ♂ ad., Tapa, 27. viii., 5, 9. ix., 1905 (Nos. 6788, 6849, 6886).

2. *Turnix maculosus* (Temm.).

Cf. *Nor. Zool.* 1904. p. 176.

1 ♀ ad., Tapa, 20. x. 1905 (No. 7005).

3. *Ptilinopus cincta ottonis* Hart.

Ptilinopus cincta ottonis Hartert, *Nor. Zool.* 1904. pp. 178, 179 (Dammer and Babber. Terra typica : Dammer).

A fine series was obtained near Tapa, on Babber Island, in August and September 1905 (Nos. 6605, 6609, 6622, 6624, 6628, 6640, 6690, 6700, 6703, 6755, 6756, 6816). "Iris burnt sienna (brick-red in most specimens). Feet dark red (chocolate-brown, purplish red, dark purple). Bill: tip yellowish, base dark (olivaceous).

4. *Ptilinopus xanthogaster xanthogaster* Wagl.

Cf. *Nor. Zool.* 1904. p. 179. no. 8.

Eleven examples killed at Tapa in August and September (Nos. 6606, 6615, 6619, 6629, 6630, 6631, 6653, 6737, 6753, 6801, 6801A).

It is interesting to find that *P. x. xanthogaster*, the same as found on Banda, Key, Dammer, Taam, Teor, Manggoer, Koer and the Timorlaut (Tenimber) group, occurs on Babber, and not *P. x. roseipileum* (*Nor. Zool.* 1904. p. 179), which inhabits Roma, Moa, Kisser, Letti and Wetter.

5. *Ptilinopus wallacei* Gray.

Ptilinopus wallacei Gray, *P. Z. S.* 1858. pp. 185, 195. pl. 136 (Aru Islands).

We have no specimen from Arn, but a large series from the Key and other islands. Kühn's men obtained fifteen specimens in August, September, October (Nos. 6603, 6654, 6662, 6734, 6758, 6781, 6836, 6843, 6887, 6904, 6905, 6907, 6942, 6963, 6998).

6. *Carpophaga rosacea* (Temm.).

Cf. Nov. Zool. 1904. p. 180.

Common near Tepa in August (Nos. 6604, 6636, 6657, 6658, 6692, 6752).

7. *Carpophaga concinna concinna* Wall.

Cf. Nov. Zool. 1904. p. 181.

Very numerous near Tepa in August and September (Nos. 6608, 6618, 6620, 6647, 6698, 6699, 6741, 6751, 6812, 6838, 6847, 6848, 6852, 6944).

8. *Turtur tigrina* (Temm. & Knip).

Cf. Nov. Zool. 1904. p. 182.

This ubiquitous Turtledove was common on Babber Island (Nos. 6744, 6762, 6817, 6823, 6915, 6918, 6921, 6923, 6927, 6928, 6929, 6935).

9. *Geopelia maugeus* (Temm. & Knip).

Cf. Nov. Zool. 1904. p. 182.

Seven specimens were sent (Nos. 6604, 6637, 6675, 6894, 6948, 6952, 6955).

10. *Chalcophaps chrysochlora* (Wagl.).

Cf. Nov. Zool. 1904. p. 183.

A series of specimens from Babber are somewhat intermediate between *C. c. chrysochlora* and *C. c. timorensis*, but few have the hindneck so continuously grey as in our typical *timorensis*. The bill, however, is rather longish, which is more or less characteristic for *timorensis*, and the extent of white on the shoulders varies somewhat. Mr. Kühn sent fifteen specimens, of which, however, very few are adult (Nos. 6617, 6635, 6649, 6659, 6681, 6740, 6794, 6834, 6837, 6839, 6860, 6855, 6861, 6914, 6914A).

11. *Sterna bergii pelecanoioides* King.

Cf. Nov. Zool. 1904. p. 185.

One skin, August 1905 (No. 6678).

I have not heretofore tried to distinguish between the various races of *Sterna bergii*, as our material was not sufficient for a complete study of them; but Mr. Rothschild, inspired by Mr. Bangs' article in *Bull. Mus. Compar. Zool. Harvard Coll.* xxxvi. 1901. p. 257, suggested to me that there were probably as many races of *Sterna bergii* as of other widespread birds, and I find this really to be the case, although these races are closely allied and not recognisable by a confirmed lumpner, who has not trained his eye for careful comparison. Probably the name for the *Sterna bergii* form from all these islands is to be *S. b. pelecanoioides* King (*Surv. Int. Austr.* ii. p. 422, 1826).

12. *Charadrius squatarola* (L.).

Cf. *Nor. Zool.* 1904. p. 186.

♀ ad. Tapa, 12. viii. 1905 (No. 6607).

13. *Ochthodromus geoffroyi* (Wagl.).

Cf. *Nor. Zool.* 1904. p. 186.

Three females, shot in September (Nos. 6986, 6989, 6991).

14. *Numenius phaeopus variegatus* (Scop.).

Cf. *Nor. Zool.* 1904. p. 186.

Six specimens (Nos. 6912, 6919, 6926, 6975, 6983, 6983 A).

15. *Limosa limosa melanuroides* Gould.

[*Scolopax Limosa* Linnaeus, *Syst. Nat.* ed. x. p. 147 (1758—"Habitat in Europa." Terra typica : Sweden, ex Fauna Suecica 144), Linnaeus' only quotation.]

Limosa melanuroides Gould, *P. Z. S.* 1846. p. 84 (Port Essington, Australia).

The eastern Black-tailed Godwits are constantly very much smaller (wing one to two inches shorter, bill shorter and not so thick at base) than the European form, so that they must be separated subspecifically. Mr. Kühn sent two moulting specimens, a ♂ and a ♀, shot on September 12th and 29th near Tapa (Nos. 6920, 6982).

16. *Totanus hypoleucos* (L.).

Tringa Hypoleucos Linnaeus, *Syst. Nat.* ed. x. p. 149 (1758—"Habitat in Europa." Terra typica : Sweden ; from first quotation).

Cf. *Nor. Zool.* 1901. p. 187.

Three specimens, August and September (Nos. 6689, 6763, 6970).

17. *Glottis nebularius* (Gunn.).

Scolopax nebularius Gummerus, *Leem, Lapp. Beskr.* 1767. p. 251 (Lappland).

Six specimens, August and September (Nos. 6709, 6795, 6815, 6902, 6903, 6906).

18. *Heteractitis brevipes* (Vieill.).

Cf. *Nor. Zool.* 1901. p. 187.

1 ♂, Tapa, 1. ix. 1905 (No. 6822).

19. *Terekia cinerea* (Gädd.).

Cf. *Nor. Zool.* 1904. p. 187.

1 ♂, Tapa, 12. ix. 1905 (No. 6910).

20. *Limonites ruficollis* (Pall.).

Cf. *Nor. Zool.* 1901. p. 187.

Six specimens, August and September (Nos. 6765, 6908, 6913, 6917, 6956, 6997).

21. *Heteropygia acuminatus* (Horsf.).

Cf. *Nor. Zool.* 1904. p. 187.

1 ♀, Tapa, 12. ix. 1905 (No. 6916).

22. *Tringa crassirostris* Temm. & Schl.

Cf. *Nor. Zool.* 1904, p. 187.

1 ♂, Tapa, 12. viii. 1905. "Iris dark brown; feet dark slate; bill black." (No. 6608.)

23. *Stiltia isabella* (Vieill.).

Cf. *Nor. Zool.* 1905, p. 202.

We did not receive specimens from the other South-West Islands. Six specimens were sent from Tapa, on Balber (Nos. 6638, 6648, 6832, 6895, 6947, 6958).

24. *Lobivanellus miles* (Bodd.).

Cf. *Nor. Zool.* 1905, p. 200.

This species too was not received from the other South-West Islands. One female was shot at Tapa on September 5th (No. 6851).

25. *Esacus magnirostris* (Vieill.).

Cf. *Nor. Zool.* 1904, p. 187.

1 ♂ ad., Tapa, 19. viii. 1905 (No. 6668).

26. *Ibis molucca* Cuv.

Cf. *Nor. Zool.* 1905, p. 203.

1 ♂ juv., 1 ♀ ad., Tapa, August and September (Nos. 6677, 6923). No ibis was obtained by Mr. Kühn on the other South-West Islands.

27. *Platalea regia* Gould.

Cf. *Nor. Zool.* 1904, p. 188.

1 ♂, Tapa, 11. ix. 1905 (No. 6909).

28. *Demiegretta sacra* (Gm.).

Cf. *Nor. Zool.* 1904, p. 188.

Two grey examples and one white one, August 1905 (Nos. 6759, 6761, 6874).

29. *Notophox novaehollandiae* (Lath.).

Cf. *Nor. Zool.* 1904, p. 188.

1 ♀ ad., Tapa, 24. viii. 1905 (No. 6742).

30. *Nycticorax caledonica* (Gm.).

Cf. *Nor. Zool.* 1904, p. 188.

2 ♂♂, 1 ♀, September 1905 (Nos. 6821, 6829, 6833).

31. *Plotus novaehollandiae* Gould.

Plotus norae hollandiae Gould, *P. Z. S.* 1847, p. 34 (S. Australia).

♂ ♀, 17. viii., 1. ix. 1905 (Nos. 6661, 6818).

32. *Pelecanus conspicillatus* Temm.

Pelecanus conspicillatus Temminck, *Pl. Col.* v. Taf. 276 (1824: Australia).

1 ad., Tapa, August 1905 (No. 6805). We received no pelican from the other South-West Islands.

33. *Haliastur indus intermedius* Gurn.

Cf. *Nor. Zool.* 1904, p. 189.

3 ad., 2 juv., Tapa, August and September (Nos. 6600, 6639, 6666, 6680, 6984). The adult birds are typical *intermedius*, having black shafts to the white feathers of the underside.

34. *Astur albiventris polionotus* (Salvad.).

Urospizius polionotus Salvadori, *Aggiunte Orn. Papuasie* i. p. 19 (1889: Timorlaut).

1 ♂ ad., 1 ♀ ad., 1 ♀ juv., Tapa, August and September (Nos. 6641, 6899, 6957). "Iris, ♂ ad. orange, ♀ ad. brown; feet sulphureous, bill black."

The adult female agrees perfectly with our specimens from Tenimber, Banda, and Danmer, while the male differs from our single male (from Banda) in having only the jugular region vinous, the lower breast and abdomen as well as the thighs white, with barely a tinge of vinous and an indication of bars on the sides of the abdomen. Whether this is an individual character, or peculiar to all Babber examples, cannot be guessed without more material. Possibly both *albiventris* from the Key Islands and Manggoer and *polionotus* may eventually be looked upon as subspecies of *A. torquatus*, but it requires more time than I can at present afford to study the relations of these forms at full length.

35. *Tiannunculus moluccensis occidentalis* Mey. & Wigl.

Cf. *Nor. Zool.* 1904, p. 190.

The Kestrel of the South-Western Islands is *T. m. occidentalis*, and the specimens, four in all, sent from Babber agree with those from Kisser, Letti, and Moa, showing no approach to the darker *T. m. moluccensis* (Nos. 6632, 6819, 6827, 6911).

36. *Tiannunculus cenchroides* (Vig. & Horsf.).

Falco cenchroides Vigors & Horsfield, *Trans. Linn. Soc. Lond.* xv. p. 183 (1826: Australia).

We did not receive this species from the other South-West Islands. Kühn's hunters obtained 1 ♂, 2 ♀♀ at Tapa, 24, 29. viii., and 1. ix. 1905 (Nos. 6735, 6796, 6820). "Iris brown; feet sulphureous; bill slate with black tip."

37. *Falco peregrinus ernesti* Sharpe.

Falco ernesti Sharpe, *Ibis* 1894, p. 545 (Borneo).

1 ♀ ad., Babber, 25. ix. 1905. "Iris brown; feet chromeous; bill slate-colour." (No. 6953.)

(Cf. *Nor. Zool.* 1904, p. 190, where I recorded a young female from Wetter as *F. peregrinus melanogenys*! I am now convinced that this is rather *F. p. ernesti* than *F. p. melanogenys*.)

The Falcon from Babber is a very interesting specimen. It agrees with the specimens of *F. ernesti* from Borneo, N.W. Luzon, New Guinea and Mallikollo

in having grey (not ochraceous) under tail-coverts, with wide slaty-blackish bars, very grey (not ochraceous) flanks, with very wide bars, though the breast is not quite as grey as in the males of *ernesti*. The adult female in the British Museum and the one in Tring (from New Guinea) are still darker grey on the flanks and more cinnamon-rufous on the chest, than our Babber specimen, but in all essential characters they agree.

38. *Ninox boobook cinnamomina* subsp. nov.

Formis *Ninox boobook boobook* et *Ninox boobook ocellata* appellatis similis sed multo minor et colore lacte cinnamomino an rufo-cinnamomeo, nec griseo, nec brunneo, nec rufo.

The four specimens from Babber, obtained at Tapa in August and September, are almost alike, and their colour above is bright cinnamon, lighter on the neck, darker and more brownish on the crown. The scapulars and greater upper wing-coverts are rufous-cinnamon, with white or whitish bars and round spots. The tail is rufous-cinnamon, with more or less ill-defined, sometimes, however, rather distinct brown bars to the inner webs, which are generally much paler. The auricular region is covered with a large, very conspicuous slaty-brown patch. The under-surface varies from light reddish cinnamon with darker longitudinal patches and whitish spots on the abdomen to whitish with rufous-cinnamon longitudinal patches. Wing 209—213, tail about 120—130 mm. "Iris chromeous or whitish yellow; feet whitish; bill dull black or slate with yellow or whitish tip." Type of *Ninox boobook cinnamomina*: ♂ ad., Tapa, 22. viii. 1905 (No. 6606).

It is particularly interesting to find on Babber an apparently very constant distinct form of the *boobook*-group of owls, as the birds from Moa, Letti and Roma are much nearer to *N. boobook boobook* and *N. boobook ocellata*. Cf. *Nor. Zool.* 1904. p. 191, and 1905. p. 210. It must be said that Australian specimens vary enormously in coloration and size. Some small specimens from Derby and other places in N.W. Australia are hardly larger than my *cinnamomina*, and some are quite pale cinnamon, but not bright rufous-cinnamon. I have, however, not seen any series of specimens from one place that are alike *inter se* (we received five examples from Babber), that are so bright rufous-cinnamon, or so small. It is, therefore, not only advisable but necessary to name the Babber form. We received five skins, four marked as males, one doubtful (Nos. 6606, 6607, 6611, 6868, 6892).

39. *Eos reticulatus* (S. Müll.)

Psittacus reticulatus S. Müller, *Verh. Land- u. Volkenkunde*, pp. 107, 108 (Moluccas, no exact locality).

Not known from the more westerly islands of the group, but already obtained on Babber by Schädler (cf. Finsch, *Notes Leyden Museum* xxii. p. 285), and on Dammer by Heinrich Kühn. On Babber it is evidently quite common, as Kühn's collectors sent thirteen specimens obtained near Tapa in August and September (Nos. 6612, 6644, 6646, 6650, 6652, 6656, 6665, 6743, 6748, 6807, 6809, 6810, 6872). "Iris burnt sienna (brick-red); bill red; feet blackish."

40. *Trichoglossus euteles* (Temm.).

Cf. *Nor. Zool.* 1904. p. 193.

Mr. Kühn sent four specimens from Tapa (Nos. 6615, 6622, 6625, 6789), Schädler sent to Leyden from Babber.

41. *Tanygnathus megalorhynchos subaffinis* Sel.

Tanygnathus subaffinis Selater, *Proc. Zool. Soc. London*, 1883, pp. 51, 53, 194, 200 (Timorlaut); Finsch, *Notes Leyden Mus.* xxii, p. 290 (Babber).

Mr. Kühn sent seven specimens shot in August and September at Tapa. These birds appear to be all adult males in perfect plumage, with the exception of one (No. 6848) which is an immature male. This last one has the lesser upper wing-coverts dark green, not blue, and the outer edges to the median and greater wing-coverts are narrow and dull lemon-yellow. All the others have the lesser wing-coverts, bend of wing and tips of scapulars and median and greater wing-coverts bright blue, the borders to the wing-coverts broad and of a very bright yellow. They surpass thus in brightness of the wing our series of *T. m. subaffinis* from Tenimber (Timorlant); but as only a few of the latter are adult males in fresh plumage, and one closely approaches our Babber specimens, I believe that the differences are due to the different season and age of the birds, but not peculiar to the localities. "Iris chromeous; bill scarlet; feet slaty black." (Nos. 6601, 6770, 6806, 6840, 6846, 6945, 6946.)

The home of *T. m. subaffinis* is otherwise Timorlaut (Tenimber). It does not occur on Moa, Wetter, Letti, or Kisser.

42. *Alcyone azurea yamdenae* Rothsch.

Cf. *Nor. Zool.* 1904, p. 196.

What I said (*l.c.*) about two specimens from Roma applies exactly to two examples from Tapa, Babber Island. They may be said to agree with the type of *A. a. yamdenae*, except that their wings are slightly longer, measuring 73 and 75.5 mm., while the wing of the type of *A. a. yamdenae* measures about 70.5 mm. It is very probable that the type of *yamdenae* is an exceptionally small specimen of the same subspecies, but more material from Tenimber is necessary to decide this question finally.

43. *Halcyon australasia dammeriana* ?

Cf. *Nor. Zool.* 1904, pp. 196, 197.

The specimens from Babber are rather puzzling. They are as dark cinnamon below and on the crown and hindneck as *H. australasia dammeriana*. From the twelve specimens of *H. a. dammeriana* before me they differ as follows: the crown, instead of having a fairly large, rarely small, bluish green patch, has generally a rather smaller patch, and four examples have no patch whatever, but have the crown uniform dark cinnamon; the wing is generally somewhat shorter, varying from 75.5 to 79.5, instead of 78 to 84 mm. in *H. a. dammeriana*. The question therefore is: are our series sufficiently large to prove an average of size or more or less largely patched crown in one of these forms or not? I do not wish, at present, to decide, but probably the Babber form deserves a name. Babber lies between the Letti-Moa group and Tenimber, and we should therefore expect either the Letti-Moa form (*H. a. interposita*) or the Tenimber form (*H. a. minor*). But with neither of these do our Babber birds agree; they are darker underneath (and probably smaller) than *H. a. interposita*, and they are much darker on the throat and in the middle of the abdomen and somewhat larger than *H. a. minor*. That the Dammer form should inhabit Babber as well is very strange—but nothing is impossible.

Mr. Kühn's collectors sent twelve specimens killed near Tapa in August and September, of which six are marked as males, six as females—whether correctly or not I cannot say. "Iris dark brown; bill black and white; feet blackish." (Nos. 6612, 6619, 6669, 6679, 6696, 6880, 6881, 6882, 6894, 6940, 6964, 6972.)

44. *Halcyon sancta* Vig. & Horsf.

Cf. *Nor. Zool.* 1904. p. 196.

1 ♀, Tapa, 29. ix. 1905 (No. 6987).

45. *Halcyon chloris chloris* (Bodd.).

Cf. *Nor. Zool.* 1904. pp. 197, 198, 199.

Thirteen specimens from Tapa (Nos. 6624, 6633, 6634, 6683, 6684, 6693, 6760, 6776, 6786, 6798, 6899, 6898, 6959).

46. *Misocalius palliolatus* (Lath.).

Cf. *Nor. Zool.* 1904. p. 201.

1 ♀, 9. ix. 1905 (No. 6891).

47. *Cuculus variegatus* Vieill.

Cf. *Nor. Zool.* 1905. p. 217.

1 ♀, Tapa, 4. ix. 1905 (No. 6845).

48. *Chrysococcyx* spec. an subsp. nov.?

1 ♂ ad., Tapa, Babber Island, 15. ix. 1905. "Iris burnt sienna; bill and feet black." (No. 6939.)

♂ ad. Upper surface dark green with metallic gloss, on the crown a blue tinge. Some of the median upper wing-coverts have white terminal edges and spots, so that an irregular white patch or ring is formed, showing an approach to the Key-Islands form, *C. crassirostris*, which has a large white patch on the wing-coverts. Tail without any rufous colour; only the outermost pair with white crossbars, the next with only a round white spot at the tip of the inner web, central pair without white. Undersurface white with somewhat narrow greenish bronze crossbars, which are few and not very conspicuous on the throat, the feathers there having only one bar instead of two.

Dr. Finsch describes a similar bird from Halmahera, whence Dr. Vorderman described *C. nieuwenhuisi*. Unless the latter is a somewhat younger bird it is not the same as Finsch's! It is quite possible, or rather evident, that a special form inhabits the Molneecas, but whether that extends from Halmahera to Amboina or not is doubtful, and whether the Babber bird is the same or not can only be proved by more material.

49. *Scythrops novaehollandiae* Lath.

Cf. *Nor. Zool.* 1905. p. 219.

A young bird (No. 6769) just from the nest, unable to fly, shot at Tapa 26. viii. 1905, proving that this species is not an accidental visitor, but is hatched on Babber Island. These young *Scythrops* are peculiar and pretty things. Their head and neck is rusty buff, the feathers of the upperside with ashy-grey bases; ear-coverts

light grey; feathers of back and upper wing-coverts slaty grey with large buffish rust-coloured tips. Rectrices as in the adult birds, as far as visible; breast and abdomen white with buffy yellow tinge and narrow dark grey crossbars which are very wide apart. "Iris dark brown with a whitish ring; feet slate; bill dull brownish."

50. *Eurostopus argus* Hart.

Cf. *Nor. Zool.* 1904, p. 202.

Seven specimens (Nos. 6856, 6859, 6862, 6863, 6870, 6876, 6877).

51. *Caprimulgus macrourus* Horsf.

Caprimulgus macrourus Horsfield, *Trans. Linn. Soc.* xiii. p. 142 (1821—Java).

♀ immat., Tapa, 28. viii. 1905 (No. 6791).

This bird certainly agrees better with *C. macrourus* than with *C. macrourus celebensis*, which was received from Wetter (*Nor. Zool.* 1904, p. 202). I come, however, to the conclusion that *C. macrourus*, *manilensis* and *celebensis* are all three only subspecies, and should therefore be called *Capr. macrourus macrourus*, *C. m. manilensis* and *C. m. celebensis*, while on Ceylon we have *C. m. atripennis*, farther north *C. m. ambiguus*, *C. m. albonotatus*, and *C. m. nipalensis*.

52. *Pitta vigorsii* Gould.

Pitta vigorsii Gould, *B. Australia*, iv. pl. 2. (part II.) (1841—Believed to come somewhere from Australia! Errore. As the terra typica we may accept Banda, the first known exact locality).

1 ♀, Tapa, Babber, 21. viii. 1905 (No. 6695).

53. *Hirundo javanica* Sparrm.

Cf. *Nor. Zool.* 1904, p. 203.

1 ♂, 3 ♀♀, Tapa, 24, 26. viii. 1905 (Nos. 6738, 6766, 6768, 6773).

54. *Petrochelidon nigricans* (Vieill.).

Cf. *Nor. Zool.* 1904, p. 204.

2 ♂♂, Tapa, 27. viii. 1905 (Nos. 6778, 6779).

55. *Muscicapula hyperythra audacis* subsp. nov.

♂. Similar to *M. hyperythra hyperythra* in general appearance, but larger, especially the bill much longer, the metatarsus longer, wing longer. The inner edges to the quills are lighter, more whitish, the under wing-coverts have more buffy-white colour. Wing 63.7—65.4, tail about 42—45, culmen 14—14.5, metatarsus about 20 mm. (Type ♂ ad. No. 6864, Tapa, 6. ix. 1905). "Iris brown, blackish, or whitish yellow." This last statement, however, is probably erroneous. "Feet pale plumbeous, dull black, blackish; bill black."

5 ♂♂, Tapa, Babber, August, September 1905 (Nos. 6780, 6850, 6854, 6864, 6985).

1 "♀," Tapa, 6. ix. 1905 (No. 6866). Differs from those of *M. h. hyperythra* in having the back and scapulars distinctly greyish, not olive like the head, and the breast buffy rufous, the middle of the abdomen and the under tail-coverts

white, with only a faint tinge of buff; but possibly this supposed ♀ may be a young ♂, in which case the value of these differences is of course doubtful.

NOTE.—Dr. Finsch (*Notes Leyden Mus.* xxii. pp. 261, 262) places my *Dammeria heurici* (cf. *Nor. Zool.* 1900. p. 14) from Dammer in the genus *Poecilodryas*. I cannot agree with this decision. I readily believe that it is desirable to diminish the genera of *Muscicapidae* very considerably; but if this is done, and *Dammeria* should be suppressed, it would far better be united with *Muscicapula* than with *Poecilodryas*, a genus which inhabits Australia and the Papuan Islands, but not the South-West Islands. Moreover, the structure is different, the tail of *Poecilodryas* being softer and shorter, the bill weaker. The sexes of *Dammeria* differ considerably, as in *Muscicapula*.

56. *Gerygone dorsalis fulvescens* A. B. M.

Gerygone fulvescens A. B. Meyer, *Isis* 1884. pp. 2, 27 (Babber).

The *Gerygone* from Babber has been separated by Meyer, *l. c.* Undoubtedly all these forms—*i. e.* *kühni* from Dammer (which is quite different from both *dorsalis* and *fulvescens*), *fulvescens* from Babber, *sequens* from Roma, and others—are representative forms, and Dr. Finsch's surmise, from the comparisons of spirit-specimens, that "*kühni*" as well as *fulvescens* are found on Babber, is erroneous. Dr. Finsch's *kisserensis* (cf. *Notes Leyden Mus.* xx. p. 133, *Nor. Zool.* 1904. p. 205) is merely a synonym of *fulvescens*—at least I cannot separate our specimens from Kisser, Moa, Letti and Baliber. Mr. Kühn sent six specimens from Babber.

3 ♂ ad., 1 ♂, 1 ♀ act. med., 1 ♀ juv., Tapa, September 1905 (Nos. 6841, 6844, 6853, 6875, 6969, 6976). "Iris burnt-sienna brown; bill black in adults, brown in young; feet slate-black."

57. *Rhipidura fusciorufa* Sel.

Rhipidura fusciorufa Schater, *Proc. Zool. Soc. London*, 1883. p. 197 (Tenimber).

10 ♂ ♀ ad., Tapa, August and September 1905 (Nos. 6688, 6701, 6826, 6873, 6883, 6937, 6955, 6962, 6968, 6971). "Iris blackish; bill black; feet dark brown or blackish."

Dr. Finsch has already made known the fact, that the Babber form is the same as the one from Tenimber (Timorlant).

58. *Rhipidura elegantula reichenowi* Finsch.

Rhipidura Reichenowi Finsch, *Notes Leyden Museum* xxii. p. 257 (Babber).
(Cf. *Nor. Zool.* 1904. p. 206, sub nomine *Rh. elegantula*.)

1 ♂ ad., Babber, 28. ix. 1905 (No. 6981).

Dr. Finsch separated *Rh. reichenowi* from *elegantula* on account of its rusty-cinnamon, instead of white, forehead. I ventured (*l. c.*) to unite *reichenowi* with *elegantula*, because among our twenty-nine examples from Moa, Letti, Roma and Dammer I found two specimens which agreed with Dr. Finsch's type of *reichenowi*. Perhaps my conclusion has been too hasty, because the specimen received from Kühn has also a cinnamon forehead. If all specimens from Babber have a rusty-cinnamon forehead, the Babber form would be a subspecies, in spite of the occurrence of single individuals on other islands which are similar in colour. Only more skins from Babber can decide whether *reichenowi* is really separable from *elegantula* or not. I have termed this form *Rh. elegantula reichenowi*, but this nomenclature may not be final; there is little doubt that other forms are

also subspecies of this same species, but I cannot work this question out finally at this moment, and it serves my purpose at present if I show in my nomenclature that "*Rh. reichenowi*" is a subspecies of *elegantula*, if separable at all.

59. *Pratincola caprata caprata* (L.).

Cf. *Nor. Zool.* 1904. p. 209.

1 ♂, 2 ♀ ♀, Tapa, August and September 1905 (Nos. 6800, 6951, 6993).

60. *Lalage timoriensis* (S. Müll.).

Cf. *Nor. Zool.* 1904. p. 208.

1 ♂, 1 ♀, Tapa, August and September 1905 (Nos. 6775, 6938). The males vary with regard to presence or absence of a white superciliary line. In most cases this is indicated, but sometimes it is well developed, sometimes absent.

61. *Graucalus melanops* (Lath.).

Cf. *Nor. Zool.* 1904. p. 208.

Twelve specimens from Tapa, August and September 1905 (Nos. 6623, 6710, 6797, 6811, 6813, 6824, 6831, 6857, 6869, 6944, 6955, 6960).

62. *Heteranax mundus* (Sel.).

Monarcha mundus Scater, *Proc. Zool. Soc. London* 1883. p. 54. pl. xii. fig. 2 (Timorlaut or Tenimber).

Heteranax mundus Hartert, *Nor. Zool.* 1900. p. 14 (Dammer): Finsch, *Notes Leyden Mus.* xxii. p. 267 (Baber, Dammer).

4 ♂ ad., 2 ♂ juv., Tapa, August and September 1905 (Nos. 6664, 6674, 6803, 6930, 6933, 6941).

Dr. Finsch (*l.c.*) declares that this interesting bird is not a Flycatcher, but belongs to the *Laniidae* or *Prionopidae* of Sharpe. This conception is quite erroneous. Dr. Finsch apparently based it only on a superficial comparison of the strange bill; but had he taken into consideration the plumage, style of coloration, strong rictal bristles, etc., combined, he would agree that *Heteranax* is a Flycatcher, and that it is best placed in the neighbourhood of *Monarcha*.

63. *Geocichla peronii audacis* Hart.

Cf. *Nor. Zool.* 1904. p. 208.

Nine adult birds from Tapa (Nos. 6610, 6782, 6783, 6787, 6787A, 6883, 6900, 6954, 6961).

64. *Cisticola exilis* (Vig. & Horsf.).

Cf. *Nor. Zool.* 1904. p. 210.

2 ♂ ♂, 1 ♀, Tapa, August and September 1905 (Nos. 6616, 6835, 6932).

65. *Orthnocichla subulata advena* subsp. nov.

Subspeciei *O. subulata subulata* dictae similis, sed major, colore supra rufescentiore, rostro nigricantiore haud difficile distinguenda.

Differs from *O. subulata subulata* from Timor by its smaller size, more rufescent colour of the upper side, and darker, blackish, not light brown, upper bill. Wing, ♂ 58, ♀ 57; tail, ♂ 27.5, ♀ 26; culmen, 16; metatarsus, 21.6 mm.

Type No. 6858, Tapa, 6. ix. 1905, ♂ ad.

Mr. Kühn sent only a pair, ♂ ♀, Tapa, 6, 7. ix. 1905. " Iris blackish: feet colourless; bill black, pale below." (Nos. 6858, 6871.)

The occurrence of an *Orthnocichla* so far eastwards is of extreme interest, and we may imagine from this fact, that all the islands between Babber and Timor have forms of *Orthnocichla* as well, either our *advena*, or undescribed ones. Probably new forms are still to be discovered on Roma and Dammer.

The wings of our *O. s. subulata* measure in the ♂ 55—56·5, ♀ 52—53·3 mm.

66. *Pachycephala melanura tepa* subsp. nov.

This most interesting new form of *Pachycephala* is apparently nearest to and stands between those from Dammer and Wetter. These forms may be distinguished as follows:

Pachycephala melanura dammeriana Hart.

Dammer.—Edges to remiges grey with an olive-green tinge. Tail black with greenish grey-brown tip and greenish outer margins towards the base; bill slender and strongly hooked.

Pachycephala melanura tepa subsp. nov.

Babber.—Edges to remiges greenish. Tail olive-green, with a blackish shaft-line and black antepical area of variable extent, and an olive-green tip; bill stouter, and, as a rule, not so strongly hooked.

Pachycephala melanura arthuri subsp. nov.

Wetter.—Light grey margins to the distal halves of primaries, broad greenish ones to the secondaries, entirely green tail, bill elongated. Differs from *P. m. calliope* by having a longer bill, culmen 21·7—23·3 mm. (20—21 in *calliope*), and in being more yellowish above, especially on the nape. Named after Arthur Goodson of the Tring Museum.

Pachycephala melanura calliope Bp.

Timor.—Like *P. m. arthuri*, but the bill a little shorter, the upperside less yellowish.

The female of *P. m. tepa* differs also from those of its allies. The top of the head, sides of head, ear-coverts and nape are greyish brown, contrasting with and sharply separated from the olive-brown back; the rump and upper tail-coverts are greenish; tail greenish with blackish shafts; throat white, separated from the breast by a lavender-buff chest-band; abdomen saffron-yellow, sides with a brownish wash. ♂: " Iris dark brown; bill black; feet dark plumbeous grey." ♀: " Iris dark brown; bill black; feet plumbeous or slate-grey."

Type of *P. m. tepa*: No. 6644A; ♂ Tapa, Babber Island, 15. ix. 1905.—Type of *P. m. arthuri*: No. 5498, ♂, Wetter, 14. ix. 1902.

Wing of ♂ *P. m. tepa* 91—94 mm. (12 specimens).

Wing of ♂ *P. m. dammeriana* 90—94 mm. (5 specimens).

Wing of ♂ *P. m. calliope* 87—89 mm. (4 specimens).

Wing of ♂ *P. m. melanura* about 79—84 mm. (5 specimens).

Wing of ♂ *P. m. arthuri* about 88—93·5 mm. (5 specimens).

Mr. Kühn sent twenty specimens, shot in August and September 1905 (Nos. 6621, 6642, 6644A, 6645, 6651, 6660, 6672, 6676, 6702, 6733, 6739, 6757, 6774, 6804, 6808, 6820, 6830, 6889, 6896, 6897).

67. *Pachycephala arcitorquis kebirensis* Mey.

Cf. *Nor. Zool.* 1904. p. 212.

At last we have received a series from Babber, *i.e.* topotypical *kebirensis*. They bear out what I wrote two years ago (*l.c.*). The females have the crown brownish or rufous grey. Though occasionally examples of *P. a. arcitorquis* approach them, as a rule the two forms are easily separable in the female sex. Mr. Kühn sent from Babber :

4 ♀ ad., 1 ♂ juv., 3 ♀ ♀, Tapa, August and September 1905 (Nos. 6629, 6697, 6767, 6771, 6777, 6924, 6936, 6943).

68. *Zosterops bassetti* Sharpe.

Cf. *Nor. Zool.* 1904. p. 214.

(As I have said before, I cannot decide, without a complete study of the genus *Zosterops*, how many forms can be named trinomially, and therefore employ binomials for them at present. As long as we distinguish minutely, our labour will not be lost.)

The specimens from Babber and Luang appear to be quite similar to each other, and I cannot distinguish them from examples from Dammer and Roma (cf. *Nor. Zool.* 1904. p. 214). The bills of the Babber and Luang specimens are as large as in those from Roma and Dammer—some, if anything, even larger. *Z. lettiensis* has a much smaller bill and is more white underneath, and *Z. citrinella* of Timor is still smaller, with a much smaller bill. Mr. Kühn sent twelve *Z. bassetti* from Babber (Nos. 6685, 6686, 6746, 6747, 6792, 6842, 6867, 6901, 6965, 6967, 6979, 6996).

69. *Dicaeum mackloti salvadorii* A. B. Meyer.

Dicaeum salvadorii A. B. Meyer, *Abh. Isis.* 1884. pp. 7. 38 (Babber); cf. Finsch, *Notes Leyden Museum* xxii. p. 274.

In *Nor. Zool.* 1904. p. 214 I enumerated specimens from Roma and Moa as *Dicaeum mackloti* subsp. nov.?, saying that they were somewhat apparently intermediate between *D. m. mackloti* and *D. m. salvadorii*, of which I had only a single male in poor condition from Dammer, and none from the "terra typica" (Babber), and that the black band surrounding the red throat was "nearly always wider in the Roma birds." Now we have received topotypical specimens from Babber, and I find that I cannot separate the specimens from Moa from those of Babber, while those from Roma have the red of the throat darker (as dark as in the "typical" *mackloti* from Timor), and surrounded by a wide black band, in adult birds; while in *D. m. salvadorii* this band is absent or indicated, but never wide and well developed.

I distinguish, therefore, the following forms :

Dicaeum mackloti mackloti Müll.

Smaller, ♂ ad., wing about 54·5 to 56·5, abdomen white with a creamy tinge, dark red throat-patch surrounded by a broad black line : Timor and Savu.

Dicaeum mackloti romae subsp. nov.

Larger, ♂ ad., wing about 58—59·5, abdomen yellowish cream-colour, dark red throat-patch surrounded by a broad black line : Roma. Type No. 5399, Roma, 10. viii. 1902, H. Kühn coll.

Dicaeum mackloti salvadorii A. B. Mey.

About as large as *D. m. romae*, wing ♂ ad. about 57—59, abdomen yellowish cream-colour, the somewhat lighter, more fiery red throat-patch not surrounded by a wide black line, but only by an indicated or narrow band, if present at all. Babber and Moa Islands.

The one male we have from Dammer seems to belong to *salvadorii*. Perhaps it does not occur there regularly. The specimen is not in very good condition.

Mr. Kühn sent from Babber 5 ♂♂ and 7 ♀♀ (Nos. 6616, 6618, 6621, 6687, 6691, 6729, 6828, 6865, 6884, 6931, 6973, 6999). “♂♀ Iris black, feet black, bill black.”

70. *Myzomela boiei annabellae* Sel.

[*Myzomela boiei* S. Muller, *Verh. Land- u. Volkenkunde*, p. 172 (1839-44, Banda).]

Myzomela annabellae Selater, *P. Z. S.* 1883. p. 56 (Latur, Tenimber).

M. boiei boiei differs from *M. b. annabellae* as follows: It is larger, and the black area limiting the red throat is much wider. Otherwise they agree in all essential characters.

Mr. Kühn sent a fine series from Babber (Nos. 6613, 6614, 6617, 6655, 6663, 6667, 6670, 6671, 6682, 6728, 6731, 6732, 6736, 6749, 6750, 6977, 6980, 6990).

71. *Stigmatops squamata* Salvad. (?subsp.).

Cf. *Nor. Zool.* 1904. p. 215.

The wings of the Babber examples measure from 61 to 71 mm. Probably the smaller specimens are females. About the somewhat doubtful *S. s. salvadorii* and *kebirensis*, a name given to the Babber birds (A. B. Meyer, *Zeitschr. Ges. Orn.* 1884. p. 218), see *Nor. Zool.* 1904. p. 215, and Finsch, *Notes Leyden Mus.* xxii. p. 270. Mr. Kühn sent nine skins from Babber (Nos. 6627, 6785, 6799, 6874, 6962, 6974, 6988, 6995, 7004).

72. *Erythrura tricolor* (Vieill.).

Cf. *Nor. Zool.* 1904. p. 217.

♂♀ ad. and juv., Tapa, August and September (Nos. 6613, 6714, 6730, 6793, 6798, 6825, 6966, 6994).

None of these specimens have any blue on the hindneck.

73. *Munia quincolor* (Vieill.).

Loxia quincolor Vieillot, *Ois. Chant.* pl. 51 (1805—Finsch, *Notes Leyden Mus.* xxii. p. 277 (one specimen from Babber).

2 ♂ ad. (one worn and both moulting), 1 ♂ med., 2 juv., Tapa, August and September 1905 (Nos. 6772, 6878, 6888, 6949, 6950). The young bird seems to be undescribed; it is in colour exactly like that of *M. pallida*, being above cinnamon, below yellowish buff. The wings are longer than in young *M. pallida*. The adult female differs only slightly from the adult male.

74. *Munia punctulata nisoria* (Temm.).

Cf. *Nor. Zool.* 1904. p. 218.

Tapa, Babber, August, September and October 1905, young birds in moult (Nos. 6754, 6879, 6992, 7000, 7001, 7002).

75. *Artamus leucorhynchus* (L.).

Cf. *Nov. Zool.* 1901. p. 221.

Tepa, Babber, August 1905 (Nos. 6625, 6626, 6745, 6764, 6784, 6802, 6926, 6978).

76. *Corvus latirostris* ? subsp.

Corvus latirostris A. B. Meyer, *Zeitschr. Ges. Orn.* i. p. 199 (1884: Timorlaut).

Cf. *Nov. Zool.* 1901. pp. 173, 174.

The specimens from Babber agree in all essential characters with *Corvus latirostris* from Timorlaut (Tenimber), but they are somewhat larger. They measure: ♂ ad. wing 339, ♂ ad. wing 342, ♀ ad. wing 318, ♀ ad. wing 316 mm., while specimens from Timorlaut measure ♂ ad. wing 328, ♂ ad. wing 317, ♀ ad. wing 322, ♀ jun. wing about 306 mm.

Possibly the Timorlaut specimens are not all correctly sexed. If we accept that the alleged males are all adult males, the Babber form would be a larger, and should be separated subspecifically, but I should like to see a better series before doing this.

Mr. Kühn's four examples from Tepa bear the Nos. 6611, 6623, 6627, 6694. The iris is described as white, bill and feet black. In *Nov. Zool.* 1901. pp. 173, 174, I have discussed this form, which has quite erroneously been united with *C. macrorhynchus*.

 ON THE BIRDS OF LUANG.

By DR. ERNST HARTERT.

WE had hoped that Mr. Kühn's collectors, after their work on Babber, would visit the large island of Sermatta, but unfortunately they chose the little islet of Luang, near Sermatta. They collected there 41 species of birds, mostly of little interest to us. Undoubtedly Sermatta would contain many more species.

1. *Synoicus raalteni* (S. Müll.) (*Nov. Zool.* 1904. p. 177). ♂ 6. xi. 1905 (No. 7031).

2. *Ptilinopus cincta lettiensis* Sch. (*Nov. Zool.* 1904. p. 179) (Nos. 7063, 7066, 7072, 7076, 7093, 7096, 7097). It is interesting to find that *P. c. lettiensis* and not *ottonis* is found on Luang.

3. *Ptilinopus xanthogaster xanthogaster* Wagl. (cf. *antea*) (Nos. 7013, 7026, 7038, 7051).

4. *Carpophaga rosacea* (Temm.) (cf. *antea*) (Nos. 7032, 7092).

5. *Geopelia maucus* (Temm. & Knip) (cf. *antea*) (Nos. 7028, 7030).

6. *Gelochelidon nilotica* (Gm.) (*Nov. Zool.* 1904. p. 199) (No. 7021). This bird, marked ♂, is very young. It appears to be the European small-billed form, and not *macrotarsa*. Adult birds should, however, be compared, to be certain about this.

7. *Sterna bergii pelecanooides* King. (cf. *antea*) (Nos. 7022, 7091).